* Cover image is a photo collage of the University of Washington Bothell and Cascadia Community College campus as designed by THA Architecture
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ACKNOWLEDGEMENTS

The planning effort for the University of Washington Bothell and Cascadia Community College Master Plan included participation by faculty, staff, students, and the design team. Thanks go to all who participated in this effort.

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INTRODUCTION

In Fall 2009, the University of Washington Bothell commenced a master plan update to establish a site for the upcoming UW Bothell Phase 3 Science and Academic Building and confirm the capacity build out of the campus for a 10,000 Full-Time Equivalent student body. This 2010 Master Plan is the result of that effort and supersedes all previous master plans for the campus.

The University of Washington Bothell (UWB) and Cascadia Community College (CCC) are collocated on a 128-acre campus, and the 2010 Master Plan is a holistic vision for the entire campus. While previous master plans were administered through Washington State’s General Administration, this is the first master planning effort administered by the University.

UW Bothell established a Master Plan Oversight Committee and Master Plan Work Group to guide the development of the 2010 Master Plan. The Master Plan Oversight Committee included the President of Cascadia Community College to ensure coordination across both institutions. The Master Plan Work Group was comprised of a diverse group of UW Bothell administrators, faculty, staff, and students. Campus-wide input for the master plan was accomplished through town hall meetings and several open houses, an eco-charrette workshop, the 2009 UWB Faculty and Staff Retreat, and meetings with the UWB Advisory Board and the CCC Board of Trustees.

SCOPE OF STUDY

The master planning effort explored many facets of the University at a conceptual level including organizing principles of the campus, the physical expression of the University’s identity, circulation and universal access for pedestrians, vehicles and bikes, a network of open spaces and creating a heart of campus, the role of sustainability, campus utilities and systems, the nature and placement of future buildings, parking, and relationships between the University, the City of Bothell, neighbors and industry partners. Additional studies that may be developed in the future to further support development of the campus include campus-specific building standards, site and landscape standards, utility infrastructure, parking access, and transportation plans.

PLANNING GOALS

The Master Plan Work Group developed a set of goals based on the UWB 21st Century Campus Initiative to guide planning concepts. The goals represent the collective aspirations of the Master Plan Work Group and are not prioritized. The goals are:

Get “Bothellized”
Create a place that reinforces and embodies the collaborative, nimble, action-oriented, student-centered, ambitious spirit of UW Bothell and CCC.

Serve the Students
Continuously strive to anticipate student needs and understand evolving learning and teaching methods.

Plan for the Future
Accommodate flexibility and embrace innovative ideas and emerging technologies, programs and research.

Embrace Sustainability
Embrace sustainability in the broadest sense: economically, academically, and environmentally.

Create a Sense of Place
Create places that unify people and activities in healthy, sustainable, vibrant ways.

Connect with the Community
Connect the campus community with the greater surrounding community including the City of Bothell and its industry partners. Engage the larger community and establish a sense of welcome.

PROGRAM GOALS

In the 2009-10 academic year, UWB and CCC served an approximate combined total of 4700 student FTEs, nearly half of the anticipated student population at full build-out.

Previous master plans (see pg 77 for reference) assumed that all campus needs would be accommodated within the current campus boundary. This master plan identifies programmatic elements to support a thriving campus community of 10,000 student FTEs for a comprehensive 4-year university and 2-year community college and realizes that all the needs of the campus population at full build out cannot be accommodated within the campus boundaries where only 27% of the current campus land is available for future development (see page 24 for details).

MASTER PLAN

During the planning process an organizing campus framework began to emerge, providing an enduring structure of circulation, views, and open spaces that achieve planning goals and principles and allow flexibility in phasing and implementing future buildings. Through the majority of this report, the update of the campus master plan is simply referred to as the “master plan”. Planning principles are further described in the Master Plan section of this report and include a universally accessible circulation grid, planning zones, the nature and density of future growth, sustainability and building orientation, and preservation of the campus character and landscape.

The adjacent Figure 1 illustrates the UWB/CCC 2010 Master Plan.
Figure 1: UWB/CCC 2010 Master Plan
REGIONAL OVERVIEW

The Puget Sound region is rich in biodiversity, cultural history, and technological innovation. The UWB/CCC campus is centrally located in the Puget Sound region at the base of the North Creek watershed which feeds North Creek, coursing through the campus wetland and connecting to the Sammamish River to the south. Five species of salmon (Chinook, Coho, Kokanee, Sockeye and Chum) spawn in North Creek and pass through the campus. This is a significant indicator of the health of the larger bioregion and underscores the value of the wetlands as both a natural and an academic resource.

As Figure 2 depicts, the campus is connected to nearby communities by Interstate 405, SR 522, and by widely-used trail systems (the Sammamish River Trail to the east, the Burke Gilman Trail to the west and the North Creek Trail to the north). The Burke Gilman Trail makes it possible to cycle from the UWB/CCC campus to the UWS campus in less than an hour. The campus’ central location and its proximity to Bothell, Woodinville, Redmond, Bellevue, Seattle, Everett and other Puget Sound communities makes premier education and academic services accessible to Snohomish, Island, Skagit, and north/east King counties.

UW Bothell and Cascadia have developed and continue to foster strong ties with regional industries, businesses and educational institutions as an integral part of their commitment to provide access to higher education for the region’s growing population and employment training needs. The region served by the campus has been a leader in job creation and economic development.

COMMUNITY CONTEXT

The campus is located ½-mile east of downtown Bothell, bordered by Beardslee Blvd to the north, SR 522 on the south, I-405 on the east, and single and multi-family residential along the west. Refer to Figure 3 for connections to the Bothell community.
UWB and CCC share many resources with the neighboring City of Bothell and are connected to downtown Bothell via the Town-Gown Loop, a walking trail that provides access from 180th Street to Main Street within a 10-15 minute walk. The campus and community participate in collaborative efforts including Art Walks, sustainability education and recycling events, and business discounts for students. As UWB and Cascadia experience growth, the campus will continue to explore mutually-beneficial opportunities within Bothell such as student housing (see adjacent Figure 3).
**SOLAR ACCESS & PREVAILING WINDS**

With the campus located at latitude 48 north, the summer solstice provides 16 hours of sunlight with the sun positioned at 80 degrees above the horizon at noon. The winter solstice provides 8 hour days with the sun positioned at 20 degrees above the horizon at noon. This results in more intense solar gain on east building facades in the early morning, west facades in late afternoon, and rooftops midday. Figure 4 shows prevailing winds and the path of the sun at summer and winter solstices on existing buildings.

Current buildings on campus are almost exclusively oriented on a north-south axis, a pattern established with the initial master plan to limit excavation costs and place buildings along the contours of the campus’ forested hillside. In the summer, this facilitates direct glare and heat loading, requiring significant air conditioning.

The master plan proposes to orient future buildings on an east-west axis to reduce glare, heat loads, and air conditioning, and optimize the use of natural daylight to illuminate the building and other passive solar energy-saving opportunities. This orientation can generally range 15 degrees north and south of a true east-west axis and still offer maximized solar access. Because prevailing winds arrive from the northwest in fall and winter and from the northeast in spring and summer, an east-west orientation would also facilitate passive ventilation strategies.

Figure 4: Solar Access & Prevailing Winds
EXISTING BUILDINGS
1. Chase House
2. South Garage
3. Central Plant
4. UWB-1
5. UWB-2
6. Library (LB-1)
7. Library Annex (LBA)
8. Library 2 (LB-2)
9. North Creek Events Center
10. CCC-1
11. CCC-2
12. CCC-Global Arts (GLA)
13. North Garage
14. Truly House

EXISTING UWB/CCC SITE WITH LANDSCAPE CHARACTER

Figure 5: Existing UWB/CCC Site Plan
SITE CONDITIONS

Sloped Terrain
The campus topography ranges from steep slopes up to approximately 50% in the western uplands to nearly flat in the wetlands. Because the campus has limited developable land, future buildings will be in both the steep uplands and the more gentle sloped lowlands. Figure 6 shows the topography of the existing campus and its graded steps, with relatively level areas created for existing buildings and sloped terrain above and below the buildings.

The stepped condition of the site offers level access to building entries along some areas such as the Promenade walkway, but also creates landscape barriers between the steps, disconnecting views and access between neighboring buildings. Future development can mitigate slopes and strengthen connections across the slopes by using a network of accessible exterior paths and building elevators.

Site Hydrology & Soils
The site possesses unique hydrology and soil conditions, allowing for diverse landscapes and ecosystems and creating design and construction challenges for future development. Figure 7 illustrates the site’s main hydrology features including the wetland boundary, seeps and areas of frequently wet soil, and primary drainage zones where site water from upper areas of campus in the west are conveyed to the wetlands in the east. Figure 8 shows three different soil conditions in the buildable area of campus: till in the uplands, silt over till in the lowlands, and liquefaction-prone fill in the lowlands from recent excavation.

The campus is underlain by poorly-drained rich organic wetland peat and muck built from centuries of alluvial deposits. The west slope of the campus, where most existing development occurs, features a till cap of moderately well-drained soils. Below the till cap, a layer of silt and clay forms a relatively impermeable barrier to drainage, with water emerging from seeps at the toe of the western slope that create pockets of wet soil and recharge the wetlands. Below this impermeable layer, deep deposits of glacial gravels and sands are the source of artesian springs that create drainage challenges in places. Tertiary bedrock sits below the entire campus, over 1/3-mile below the surface. Excavated soil to accommodate existing buildings, also called “fill,” was spread over a significant portion of the lowlands, making it prone to liquefaction in the event of an earthquake (though no major faults are known close to the campus, the impacts to the campus from an earthquake along the Seattle Fault could be significant).
SITE ANALYSIS

17

< 10% SLOPE
< 10 - 20% SLOPE
< 20% SLOPE

Figure 6: Site Slopes

CAMPUS SITE SLOPES
Figure 8: Soil Analysis
OVERVIEW
The master plan manifests the vision for the future UWB/CCC campus, holistically addressing the growth required to support a 10,000 FTE student body, demonstrating the nature of that growth, and reinforcing a collaborative, student-focused experience.

The master plan provides a framework for buildings, open spaces, circulation routes, and campus systems that allow future development to be implemented in a flexible way to accommodate evolving program needs and funding opportunities. While the plan identifies locations for future buildings and open spaces, they are placeholders that define intent and describe approximate footprints and building areas. Because the framework provides an enduring organizing structure for the campus and allows for variation at the project level, it is expected that actual footprints and building areas for each future project will be refined and confirmed as future facilities are constructed. Future facilities may vary somewhat from the placeholders shown in the plan.

CAMPUS ANATOMY
The campus was analyzed to identify available land and the best opportunities for development. Nearly three quarters of the 128 acre site is protected or developed. In order to achieve the campus’ programmatic and planning goals and to ensure that future buildings complement the scale of the existing campus buildings, future development is planned in both the uplands and lowlands. The campus anatomy diagram in Figure 9 illustrates the planning challenge of doubling the campus population (and the associated buildings and open spaces) on a quarter of the campus’ land while maintaining the feel of a cohesive campus with a strong connection to the natural landscape.

PLANNING PROGRAM
The UWB/CCC campus was originally planned as a “2+2” campus with lower division instruction provided at the community college and upper division and graduate programs provided at the university. In 2005, the legislature directed UW Bothell to develop a comprehensive 4-year plus graduate program curriculum and in 2006 UWB accepted its first freshman class. In order to provide a full 4-year undergraduate experience, the facilities program for UWB will be expanded to include not only the needed academic facilities but also a range of student life amenities.

The Master Plan Work Group and Oversight Committee established a program of future campus needs for planning purposes. The Master Framework Plan (shown in Figure 15) accommodates the majority of program elements within the campus boundary.

It was determined that not all program needs could be met on the current campus land and that certain elements may be provided for beyond the campus boundary. Elements that were not met within the current campus boundary are shown in the Table with Figure 10 and may be provided through a variety of flexible approaches including leasing, acquisition, and public-private partnerships. Opportunities are being explored within an approximate 1.5 mile diameter zone surrounding the campus called the “Zone of Influence” (see Figure 10) as well as within the larger region. The Zone of Influence also recognizes there are mutually-beneficial opportunities to be gained by developing relationships and sharing resources with the surrounding community. The updated planning program adds to the existing campus development.

<table>
<thead>
<tr>
<th>CAMPUS ANATOMY</th>
<th>ACRES</th>
<th>% OF LAND</th>
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</thead>
<tbody>
<tr>
<td>TOTAL CAMPUS</td>
<td>128</td>
<td>100%</td>
</tr>
<tr>
<td>- WETLAND AND BUFFER</td>
<td>71</td>
<td>55%</td>
</tr>
<tr>
<td>- DEVELOPED AREA</td>
<td>12</td>
<td>9.5%</td>
</tr>
<tr>
<td>- EXISTING ROADS</td>
<td>11</td>
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<td>DEVELOPED / PROTECTED LAND</td>
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<td>- DEVELOPABLE LOWLANDS</td>
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<td>11%</td>
</tr>
<tr>
<td>DEVELOPABLE LAND</td>
<td>34</td>
<td>27%</td>
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The adjacent Figure 9 illustrates the location of Campus Anatomy components listed above.
Figure 9: Campus Anatomy
PROGRAM ELEMENTS

500,000 GSF New Academic Space
Prioritized academic space, based on space standards, is proposed in nine academic buildings and an expansion to the library. Academic buildings range between 40,000-100,000 Gross Square Feet (GSF). Building areas were based on four story buildings using the footprints shown in the plan.

900-1500 Student Housing Beds
The UW Bothell student housing program has established an initial goal of housing approximately 15% of the total UWB student population in campus housing which would equate to about 900 beds for 6,000 FTE students or 1,500 beds if the program is extended to the full student population of 10,000 FTE students. Student housing is provided in four proposed housing buildings in two clusters with a nearby café and outdoor recreation spaces. Housing facilities are planned as three stories each based on 300 GSF per bed. Dedicated parking is not provided at or adjacent to the housing buildings, but provisions are shown for accessible parking and service loading areas. While the desired number of beds is identified as 900 to 1,500, the master plan only accommodates 350 beds within the current campus boundary. The University continues to explore options for the additional beds outside the current campus boundary.

2200 New Parking Spaces
To maximize the land available for buildings and open spaces, the campus goal for additional parking is no more than 2,200 new parking spaces. A majority of the new parking will be in structured parking garages adjacent to or as expansions of existing garages. Most of the new parking will be at the south end of campus to align with the expected majority of students entering the campus from the south and to minimize vehicle traffic through the campus. The south parking garage expansion is envisioned to be constructed in two phases, with each phase adding two points of entry and exit. The proposed north garage expands eastward, at the same height and number of levels. All structured parking will be screened with trees and landscaping.

Assembly Hall
The Assembly Hall is planned as a multi-use 800-seat Hall for institutional and community gatherings, celebrations, and events. The Hall is located near the south parking garage for ease of access.

Student Activity Center
The Student Activity Center is planned as a 50,000-75,000 GSF building. The UW/CCC Student Activity Center Planning Advisory Committee (SACPAC) is currently programming the functions to be housed within it.

Student Recreation Space (indoor and outdoor)
The plan includes a multi-purpose sports field adjacent to the wetland buffer, sized to accommodate an NCAA-sized soccer field but intended to serve a variety of sports and events with synthetic field turf. A basketball court and two tennis courts are planned at the west edge of campus near the student housing clusters. An informal open space is planned adjacent to the Truly House that could accommodate frisbee and other less-structured recreational activities. The Student Activity Center will likely include additional indoor recreation space.

Student Health Services
A Student Health Services facility is not specifically located on the Master Plan but could be accommodated in the Student Center. Optionally, it could be located in another proposed new building or outside the current campus boundary.

Faculty Research Space
The master plan accommodates some faculty research on campus, but the University anticipates the majority of proposed academic space will be utilized for classrooms and student research. It is anticipated that options for faculty research will be explored outside the current campus boundary.

University Club
The University Club is a place for faculty and staff to meet, exchange ideas, and socialize. The location is not specifically identified on the master plan but could be accommodated in a proposed building, one of the historic houses on campus, or outside the current campus boundary.

Other (Physical Plant exp., Corp Yard, Café, Interpretive Ctr)
Several non-academic buildings are included for campus operations, student life, and wetlands education. The Physical Plant expansion is planned as a two story, 10,000 GSF building. The Corp Yard is planned as a 7,500 GSF building in the southwest parking lot to support shipping and receiving functions with a loading dock, two offices, short-term material storage, landscape maintenance materials, maintenance vehicles, and adequate access for 50’ trucks. The Café is planned as a 3,500 GSF building to serve the entire campus community and located near campus housing to provide convenient service to students living on campus. The Wetlands Interpretive Center is planned as a three story, 50,000 GSF building for education and research activities at the north end of the wetlands to provide close access for its research focus and to enhance the entry experience at the north end of campus.
## Existing Facilities

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<tr>
<td>Academic Space</td>
<td>450,000</td>
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<tr>
<td>Parking Spaces</td>
<td>1,950</td>
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<tr>
<td>Truly &amp; Chase Houses</td>
<td>3,000</td>
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<tr>
<td>Physical Plant</td>
<td>11,000</td>
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## Future Planning Program

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<th>Spaces</th>
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<tbody>
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<td>New Academic Space</td>
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<td>Student Housing Beds</td>
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<tr>
<td>New Parking Spaces</td>
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<td></td>
<td></td>
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<tr>
<td>Assembly Hall</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Student Activity Center</td>
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<td></td>
<td></td>
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<tr>
<td>Student Recreation Space</td>
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<tr>
<td>Student Health Services</td>
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<tr>
<td>Faculty Research Space</td>
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<tr>
<td>University Club</td>
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<tr>
<td>Other</td>
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<tr>
<td>Phys. Plant</td>
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## Total Proposed in Master Plan

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<th>Spaces</th>
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<tr>
<td>Other</td>
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## Unmet Needs to Be Explored Within the Zone of Influence

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<th>Area (GSF)</th>
<th>Beds</th>
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<td>University Club</td>
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<td>Additional Student Rec Space</td>
<td>TO BE DETERMINED</td>
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ORGANIZING FRAMEWORK

Together, the Oversight Committee, the Master Plan Work Group, and the design team developed planning principles to guide the development of planning concepts. Planning principles included:

- Enhancing the campus entries
- Locating parking at the edges of campus to maintain a pedestrian environment
- Creating a heart of campus
- Strengthening connections between buildings
- Continuing the campus’ commitment to sustainability
- Maintaining the feel of a small and cohesive campus
- Providing universal access
- Preserving the healthiest tree groves, and
- Strengthening connections and views to the wetlands

Figure 11 highlights an emerging circulation grid connecting zones of campus and the buildings within them, view corridors to the wetlands, and a network of open spaces. It also shows how the planning program, principles, and framework began to create a master plan concept. While a variety of plan configurations were explored, the framework of circulation and open spaces with buildings focused toward the center of campus endured.
Figure 11: Early Sketch of the Masterplan
ORGANIZING CONCEPTS

The orientation and location of future building sites were key concepts in organizing the master plan concept and supporting the planning principles. Orienting proposed buildings on an east-west axis provided the best opportunity for sustainable strategies such as natural ventilation and daylighting, strengthened the connections between existing and proposed buildings by forming open spaces, and provided optimal access up and down the slope through building elevators.

Creating a more pedestrian-friendly campus is another key organizing concept. Reducing the width of existing Campus Way NE and widening its sidewalks encourages walkability while still providing limited transit, emergency and service vehicle access, and accessible parking. A new north-south lane in the upland is designed to be pedestrian-friendly and provides limited emergency and service vehicle access and accessible parking. A new crescent-shaped path behind the existing Library provides accessible, walkable connections to future upland buildings and between the north and south of campus while maintaining required emergency and service access. Creating east-west pedestrian routes (hill climbs) adjacent to future buildings strengthens connections between the upland buildings and provides view corridors to the wetlands.

Planning future buildings with an average height of four stories accommodates the majority of the program while preserving the feel of a small and cohesive campus. Proposing future upland buildings in a more structured way and future lowland buildings in a less structured way enhances the view corridors, merges the plan into the landscape in a compatible manner, and begins to strengthen the connection between the built campus environment and the wetlands. Figures 12 and 13 are site sections showing existing buildings in grey and proposed buildings in color (refer to the color legend in Figure 14). Figure 14 shows the Master Framework Plan, identifying varying program elements by color.
Buildings Facilitate Access
Navigating the slopes and providing easy pedestrian access on campus is a key planning principle of the master plan and is achieved through a network of interior and exterior paths and elevators. By placing most proposed buildings on an east-west axis perpendicular to existing buildings, one can use building elevators to traverse the steeper slopes of campus as shown in Figure 15.

Optimizing Solar Control
The master plan locates most future buildings on an east-west orientation to minimize heat gain on building facades while still allowing daylight and views. This is achieved by limiting the size of building facades and openings along the east and west to minimize direct sun glare, where sun is lower on the horizon and more intense in the morning (east facade) and late afternoon (west facade). South facades are easier to control glare, where the sun angle is higher on the horizon and generally managed through sunshades and overhangs. North facades typically do not receive much direct sun. Figure 16 shows the approximate path of the sun on the spring and fall equinox and highlights south-facing building facades, with most proposed buildings oriented east-west.
Figure 16: East/West Building Orientation
Framing Views
The circulation framework of the master plan provides stair and view corridors that physically and visually connect the uplands to the wetlands. Building footprints begin to splay toward the east, opening the view corridors to the wetlands as shown in Figure 17 and providing wider views than if placed along a straight path.
Figure 17: Framing Campus Views
PLANNING ZONES

Planning zones were created to strengthen the character and intent of each zone. Zones within the plan are further described below and include:
- South Entry
- Uplands Housing
- Uplands Academic
- Campus Core
- Lowlands
- Wetlands

South Entry

Though the south entry is relatively new, it is anticipated that the majority of vehicles will arrive and depart via the south entry. This presents an opportunity to enhance the initial impression of the campus and its signature wetlands. As part of the proposed master plan shown in Figure 18, vehicular circulation at the Chase House is reversed to route traffic adjacent to and east of the Chase House, providing vehicular views to the wetlands and the historic house and gardens. A bus stop and two vehicle pull-outs are created to form the south loop, similar to provisions at the north loop. The south end of Campus Way is redesigned as a terminus and drop-off area for standard vehicles yet permits through access for buses. The south parking garage (both existing and proposed) is screened with a deep landscape buffer to accommodate trees and landscaping.

Figure 18: South Entry, Routing Visitors East of the Chase House
Upland Housing

The upland housing zone shown in Figure 20 is planned as two small student housing villages. While the buildings are clearly part of the campus they are grouped in clusters to provide a sense of community and belonging. The landscape character in this zone will be a combination of wooded groves, small informal open spaces, and an outdoor recreation area with tennis and basketball courts. In keeping with the smaller scaled housing buildings, this zone also includes a café and the Truly House. With Campus Way NE closed to standard vehicles, 110th becomes the primary vehicle access road along the west campus boundary and will include traffic calming measures (such as illuminated pedestrian street crossings used elsewhere on campus) in the housing zone to facilitate safe pedestrian crossing.

Figure 20: Upland Housing, Nestled Between Campus Academic Life and Adjacent Neighborhoods
Upland Academic
The majority of new academic space is located in the upland academic zone, with five proposed buildings carefully located to preserve some of the healthiest tree groves, connect to existing buildings, create east-west pedestrian and service vehicle routes, and view corridors to the wetlands. The character of this zone is envisioned as buildings nestled amongst trees with structured pedestrian stairs and paths woven into the existing wooded upland. Figure 21 shows a detailed view of the proposed Upland Academic and Campus Core.

Campus Core
The campus core includes most of the existing campus buildings along with some proposed future development, and focuses on landscape features and a network of open spaces to unify the campus and establish gathering spaces at the north and south ends of the crescent-shaped path (see Figures 19 and 21). A new 150’x300’ south plaza connects UWB-1, UWB-2, and UWB-3 and creates a new heart for UW Bothell while a similar plaza on the north side of the library and the crescent-shaped path combine with the south plaza to create a new central focus for the entire campus. The crescent-shaped path is an accessible roadway that connects the south plaza to proposed upland academic buildings and the existing north plaza. This path also allows space to construct a future library addition and enhance the character of the landscape between the path and the library expansion. While the crescent-shaped path is planned primarily as a pedestrian path, it will be designed to accommodate the loads of service and emergency vehicles. A redesign of Campus Way envisions a more pedestrian-friendly street that reduces street width and adds street trees, site furnishings and pedestrian-scaled lighting while preserving limited vehicle access (transit, service, emergency, and accessible parking).

Figure 21: Upland Academic & Campus Core, Connecting Existing & Proposed Buildings
Lowlands
The lowlands include proposed academic buildings, a Student Center, an Assembly Hall, a multi-use sports field, and a north parking garage expansion. As shown in Figure 22, the character of the lowlands is intentionally looser than the upland zones, engaging the wetlands in a relaxed manner, supporting view corridors, locating large open spaces in the center of the lowlands and proposed growth at the edges.

Wetlands
The campus embraces its opportunity to educate and demonstrate the successful restoration of a wetland area. A wetlands interpretive center is proposed at the north edge of the wetlands and its buffer. The center is envisioned as a highly-sustainable building dedicated to wetlands education, exploration, and research. The existing wetlands will continue to be charged with rainwater and mature as a thriving natural resource. Relative to campus access, the existing boardwalk from the North Creek Events Center to North Creek is maintained, the existing bike path is adjusted within the buffer to accommodate new buildings and redesigned for emergency vehicle access, and a new path is proposed along the perimeter of the wetlands to allow greater access and educational opportunities that support the continued health and growth of the wetlands and its wildlife.
Figure 22: Lowlands, Integrating Academics & Recreation with the Wetlands
LANDSCAPE CONTEXT & CHARACTER

The existing campus landscape is a rich and varied natural context. The growing wetlands and established upland have very different characters and work together to create the feeling of buildings nestled into their natural environment. The uplands are largely undeveloped with significant tree groves of varying health; the core of campus has a more structured quality with wide concrete pedestrian paths and a mixture of manicured and naturalistic landscaping and rockery; the lowlands are largely undeveloped and merge into the wetlands.

The proposed landscape character for the master plan illustrated in Figure 23 enhances these existing qualities. An informal and forested feel is envisioned for the uplands, with low-density housing paired with informal landscape plantings and academic buildings nestled in tree groves in the upland academic area, a more structured landscape in the core of campus with high quality hardscape combined with plantings, and academic buildings nestled in tree groves. A more structured landscape is proposed in the core of campus with high quality hardscape combined with plantings and retaining walls at the plaza and crescent-shaped path, and street trees and site furnishings along Campus Way NE. An indigenous, natural character is envisioned for the lowlands landscape, with open recreational lawns and informal plantings and trees surrounding buildings that begin to integrate into the wetlands.

Upland
The campus’ west slope primarily consists of second-growth Douglas fir and western red cedar with some newer big leaf maples interspersed. During previous campus construction efforts the tree groves were significantly reduced in size to accommodate buildings, and many remaining trees were damaged by construction activities or compromised by significant changes to the natural grade and site hydrology. In response, the Master Plan preserves the healthiest tree groves and locates future buildings and open spaces in areas of compromised groves.

Lowlands
In order to construct the existing buildings on campus, the east edge of the west slope was flattened to provide a level area for the buildings and Campus Way NE. The soil cut from the slope was spread eastward with 6 acres of fill relocated into what is now the wetlands. The restored wetland’s setbacks were established generally at the edge of this fill, which can be visually delineated as the grassy open area east of Campus Way. This lowland area is an integral piece of the campus stormwater conveyance system, with a large bioswale south of the North Creek Events Center (NCEC) and linear swales conveying filtered stormwater from water quality vaults to North Creek. Since the area is primarily artificial fill over a former wetland and floodplain, new buildings in the lowlands will need deeper structural foundations and protection from floodwaters. Future development should consider potential impacts to the wetlands and its wildlife from lighting, glare and noise.

Wetlands
The wetlands continue to be a signature resource for the campus, and the master plan both protects and engages it. The current North Creek channel was restored from its severely degraded condition only seven years ago to a revitalized wetland complex, occupying 56% of the campus and supporting five fish species, deer, beaver, coyote, frogs, and several bird species.

The master plan expands and reroutes trails within the wetlands and buffer zone to provide broader educational access to study the wetlands, yet protect the growing ecosystem and its wildlife. The North Creek Trail will be rerouted within the buffer zone and redesigned to accommodate loading for emergency vehicles. A new trail around the wetland’s perimeter is proposed for consideration. Detailed consultation with the Corps of Engineers, State Fish and Wildlife, Department of Ecology, and the City of Bothell would take place prior to implementation of any trail improvements to ensure the wetland’s continued growth and success.

As the North Creek wetland grows, the visibility of Interstate 405 and flyover ramps for SR 522 will be less and less prominent from the campus, and natural succession will result in an evolving character for the wetland.
Figure 23: Landscape Context

- UPLANDS
- LAWN
- GRASSLAND
- WETLAND

Legend:

- Former North Creek Channel
- Wetlands
- North Creek
- I-405
- SR-522
- Campus Property
- NE 108th St.
- Pebble Bluff
STREET CHARACTER

Campus Way NE
The existing Campus Way NE was built as the principal thoroughfare across campus, allowing access for cars, transit, service and emergency vehicles with campus utilities located beneath it. The existing curb-to-curb width of 50’, wider than most urban streets, tends to encourage speeding and discourage pedestrian crossings. Travel lanes are 14’ wide, with additional 11’ bays in certain locations for vehicle parking, transit drop-offs and service access. Currently, sidewalk widths on Campus Way NE range from 16’ or more along the west side of the Bookstore to narrow 6’ walks near the North Garage and significant gaps in the sidewalk network.

Given the significant proposed development in the lowlands, a redesign of Campus Way NE to a more pedestrian-oriented street will enhance walkable connections between the lowland and the campus core, while maintaining access for transit, service, and emergency vehicles, and accessible parking. The character of Campus Way NE changes with a curb-to-curb width of 22’ and reallocation of previous roadway to sidewalks, landscape, furnishings, and pedestrian lighting. Street improvements may be implemented comprehensively or be phased to coincide with adjacent building construction or utility work beneath the roadway.

The street section in Figure 26 shows a 22’ roadway with two 11’ travel lanes (narrower lanes may be negotiated with transit groups). Excess width is transferred to the pedestrian realm with a consistent 16’ sidewalk on the west side of Campus Way NE and an additional furnishing and landscape zone at the base of existing buildings. On the east side of Campus Way NE, excess width is dedicated to a consistent 13’ sidewalk, with additional opportunities for overlooks and building entry plazas adjacent to the sidewalk as new development proceeds.

Campus Way NE could feature additional elements to encourage safe pedestrian movement across the street including a curbless environment, with sidewalks defined by bollards or different paving materials or raised plazas at key crossings, particularly where stairs that transect the campus meet the roadway. Quality site furnishings should be selected as part of a campus-wide palette with ample benches, bike racks and waste/recycling receptacles placed along the corridor so as not to impede pedestrian travel. Special lighting could be used to mark the corridor and emphasize key crossings. Formal street trees are proposed along the roadway to further enhance the character and improve pedestrian safety and comfort while shading the roadway. Stormwater treatment swales could be placed along the roadway to cleanse roadway runoff, reducing the load on existing stormwater facilities.

New thinking on efficient transit provisions proposes that buses do not pull out of traffic to pick up riders; instead they idle in the travel lane, stopping traffic behind and ensuring the bus does not have to merge after pickup. Removing the bus pull-outs on Campus Way NE provides additional space for pedestrian and landscape features.
MAJOR STREETS & PATHWAYS

EXISTING BUILDINGS
1. Chase House
2. South Garage
3. Central Plant
4. UWB-1
5. UWB-2
6. Library (LB-1)
7. Library Annex (LBA)
8. Library 2 (LB-2)
9. North Creek Events Ctr.
10. CCC-1
11. CCC-2
12. CCC-Global Arts (GLA)
13. North Garage
14. Truly House

NE 180TH ST. & 110TH AVE. NE
WEST CAMPUS LANE
CRESCENT PATHWAY & PROMENADE
CAMPUS WAY NE

Figure 24: Major Streets & Pathways
110th Ave. NE
The existing 110th Avenue NE traverses the west edge of campus between NE 185th and NE 180th Avenues and is considered wide for its function. With 110th Avenue becoming the sole cross-campus route for cars, the master plan does not propose altering the cross-section or routing. Where adjacent development is proposed, the existing sidewalks could be widened in conjunction with the new buildings.

West Campus Lane
Roughly parallel to 110th Avenue NE, west campus lane is a new road, primarily for pedestrians and bicycles with allowances for service and emergency vehicles. In some cases, permitted accessible parking may be provided for building entries too far from a parking garage. This new road has been placed on a relatively flat terrace to minimize grading and facilitate movement around new buildings. As Figure 26 shows, a 20’ clear zone of travel without delineated travel lanes is proposed and could be curbless to enhance the sense of pedestrian and bike-friendliness. The proximity of buildings to this corridor will vary, with street furnishings and building entry plazas located between the buildings and the edge of the lane.

The Crescent-shaped Pathway
A major new campus walk is proposed to connect the Promenade with new development in the upland. This 20’-wide walk behind the Library will also serve as a gently sloping accessible route to new buildings on the west slope and a service and emergency route, structured to allow fire vehicles. This pathway will not exceed a 5% grade and will form the western border to the proposed plaza, contributing seat walls and steps to frame the new outdoor gathering space. As it rises towards the center of campus, entry courts adjacent to future buildings will tie into it. At the north end, the path reconnects to the existing north-south promenade, passing through a landscape of gently sloping lawn to the north of the Library. The design of this pathway should reflect its importance in the campus hierarchy of circulation, with special paving, lighting, and furnishings. Bike riding is not envisioned on this pathway as it anticipates high volumes of pedestrian traffic, including wheelchairs and will accommodate perpendicular crossings as well.
SITE ELEMENTS

The natural context of campus provides a strong identity for the institutions. The master plan builds on this dimension of institutional identity by both reinforcing the natural character of the landscape and providing quality places to accommodate the campus’ daily activities. Figure 27 highlights site features in the campus core such as the plaza, stairways, and building entry courts.

Plaza

A new 150’ x 300’ plaza provides a central gathering space and is envisioned as a set of steps and shallow terraces to provide seating and bridge the change in topography between UWB-1, UWB-2 and UWB-3. The crescent-shaped pathway traverses the west edge of the plaza, providing further activity and life to it. Materials for the plaza should be of high quality stone or unit pavers, with site furnishings considered as part of a larger campus wide system. Trees and vegetation may be included at the plaza’s edges yet maintain views and ease of movement across the space.

Building Entry Courts

Future buildings should be sited and designed to enhance and activate adjacent outdoor spaces. Courtyards and small plazas at building entries can provide places for both interaction and solitude and, when effectively designed, can contribute directly to intellectual pursuit and dialogue within the campus community, as well as quiet contemplation in a collegial setting. The most successful courtyards are those that have a sense of enclosure, provide a variety of seating opportunities, and incorporate quality materials. Proposed building footprints shown in the master plan are primarily rectangular envelopes, but future design development should allow for such spaces within or adjacent to the large envelopes.

Hill Climb Stairways

Proposed hill climb stairways are an integral part of the plan’s organizing concept, introducing circulation routes to access existing and proposed buildings and providing view corridors from the upland forest to the wetlands. The stairs are planned as integrated components to adjacent buildings and constructed together, allowing thoughtful coordination of stair landings with building entries and where appropriate, providing sheltered stairs within building overhangs. Accessible routes through campus will be provided via elevators in buildings, coordinated with stair landings to allow north-south movement between buildings with minimal elevation change.

Hill climb stairways in the upland have the opportunity to be designed together with an adjacent stormwater feature, including integrated concrete planters with shade trees and a terraced system of progressive stormwater troughs to convey water from the stair and nearby building rooftops to the wetlands. The materials used in the stairs should correspond with adjacent buildings while providing a uniform language that reinforces their role as visible corridors that weave through and connect the campus.
Outdoor Recreation Spaces
The master plan features a flat, grassy space adjacent to the Truly House in the upland housing zone for informal use such as student social events, small group studying and meetings, pick-up sports and Frisbee playing. There is currently only one space available for these unstructured activities, north of the Library, which has been expanded to more than one acre with the completion of the lawn associated with the Global Learning and Arts Building.

A new multi-purpose sports field is proposed on the east side of Campus Way NE, south of the north garage. The field, shown on Figure 22, is planned to be 70 yards wide by 115 yards long, large enough to accommodate a regulation NCAA-sized soccer field. It will be surfaced with field turf for durability in a rainy climate and can be striped for soccer, football, softball and other sports. The field is not planned to include fixed seating, and will be surrounded by pedestrian paths. The field is also intended for informal student use and potentially opened to community use. Another open grassy area is planned south of the sports field for other informal uses or events. This grassy area will also serve as a replacement bioswale, since a similar storm drainage facility nearby will be replaced with a new building. During dry summers, this area would have a firm, well-drained surface. In the winter, it will be actively serving to filter stormwater runoff so would present soggy ground and active use would not be advisable.

Two tennis courts and a basketball court are planned adjacent to the proposed housing clusters on the western edge of campus, located in the upland housing zone for convenient access to residents and shown in Figure 20. The courts will also be available for general student use. These courts can be designed with flexible striping and dimensions to allow their use for other sports such as roller hockey and soccer, or social and cultural events as needed.

Street Trees
Street trees are integral components of the streetscape design in the lower parts of campus, such as Campus Way NE and the new south campus entry. Proposed tree spacing is species dependent to provide shade and cooling for pedestrians and reduce the overall urban heat island effect. Street trees are intended to shade 65-75% of a typical sidewalk’s length and be specified with low maintenance requirements and sufficient hardiness to withstand the effects of adjacent traffic. Where possible, planting strips for street trees should be provided between new sidewalks and road edges. Where trees are planted in wells within sidewalks, wells should provide a minimum of 40 square feet of pervious area and ideally 400 cubic feet of soil.

For the upper campus, specifically along west campus lane, formal street trees are not used in order to reinforce the impression of a natural upland forest. In this area, the benefits of street trees can be achieved through a more informal planting design that uses irregular spacing and selective clustering of trees.

Structural Plantings
The campus features many areas with trees, shrubs and groundcovers adjacent to buildings. These structural plantings soften the transitions of buildings to open spaces, and screen service areas or portions of blank building facades. They play a valuable role in shading buildings and thus reducing energy use while providing visual interest and a reminder of the campus’ ecological underpinnings. Future buildings may employ native and climate-adapted structural landscapes to help new buildings blend into the campus. These fast-growing plants can help ‘heal’ the landscape and knit newly-constructed areas into the overall campus restoration effort.

Furnishings
Site furnishings are important elements of the campus landscape. They help define the campus character and improve the livability and comfort of outdoor spaces by providing places to gather, study, and socialize, and by creating opportunities for collegial communication and interaction. It is anticipated that an accompanying document to the master plan will be developed to guide the selection and placement of campus furnishings, including benches and other seating, bike racks, waste and recycling receptacles, lighting and signage.
CAMPUS SUSTAINABLE PRACTICES

CAMPUS COMMITMENT
The UWB/CCC Master Plan continues the institutions’ commitments to sustainability by addressing many of the related goals and guidelines outlined in the American College and University President’s Climate Commitment and the University of Washington’s Climate Action Plan (to become carbon neutral), UWB’s 21st Century Initiative (to guide the institution’s priorities), UWB’s Sustainability Task Force, and CCC’s Environmental Stewardship, (to implement sustainable practices in campus culture, curricula, policies, and facilities).

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED)
The Washington State Legislature has passed legislation that requires a U.S. Green Building Council LEED Silver rating be evaluated in the energy life cycle cost analysis process, which is required for all new state agency, state college and university and K-12 school construction.

CAMPUS SUSTAINABLE PRACTICES
Sustainability is a key focus of UWB and CCC is evident in every dimension of the campus. The campus landscape itself is a sustainable resource, dominated by thriving restored wetlands that occupy nearly half of the campus’ land. Many of the institutions’ practices are connected to the wetlands and help to reinforce its value, such as environment-oriented courses that study the natural landscape, managing all stormwater within the campus boundary through visible stormwater swales and features, and using environmentally-sensitive methods to maintain buildings and the landscape. The adjacent college highlights current sustainable practices including compost and worm bins, stormwater features, and students learning in the landscape.

While the landscape is a distinctive resource with visible connections to the institutions’ sustainable focuses, the campus also implements many other programs that promote sustainability. From purchasing policies to transportation coordinators to student-initiated programs and events, sustainability is embedded in the culture of the institutions.
CAMPUS SUSTAINABLE PRACTICES

SUSTAINABLE PLANNING CONCEPTS

Figure 28: Campus Sustainable Practices

- Compost Bins
- Stormwater Swale
- Worm Bins
- Stormwater Vault
- Teaching & Learning in the Landscape
- Wildlife and Cyclist in the Wetlands
CARBON REDUCTION

The UWB/CCC Master Plan manifests the institutional commitments to sustainability by planning development that reduces energy and resource use and provides sustainable teaching and learning opportunities. The master plan reduces carbon emissions in four key ways: building orientation, on-campus housing, bike-friendly trails and facilities, and a transit-friendly campus.

The majority of new buildings are oriented east-west, providing the best opportunity to use passive strategies such as daylighting, natural ventilation, and thermal mass for storing and releasing energy, all of which reduce energy demands for lighting, air-conditioning, and heating. The plan includes on-campus housing and support services which reduce commuter travel. The existing campus is connected to an excellent network of biking trails, and existing facilities for bike commuters are expanded with additional bike parking, bike lockers, and changing rooms. A second bus stop is added at the south loop to encourage additional transit service with easy access to the new south entry and a place to idle off of Campus Way NE.
Figure 29: Carbon Reduction Strategies
SUSTAINABLE SYSTEMS

The existing UWB/CCC campus is well outfitted with robust utility infrastructure from a central plant. The chilled water system has sufficient pipe capacity to accommodate the full master plan build-out, and most buildings incorporate energy-saving control systems and water-saving fixtures. The stormwater system is arguably the most sustainable system on campus, managing all stormwater on site through a split system to address “dirty” and “clean” water. Figure 30 illustrates the split system which collects “dirty” water from roads and parking lots, treats it in above ground swales and underground vaults, and disperses the treated water to the wetlands. It collects “clean” water from roofs and the landscape, reuses some for irrigation and domestic grey water use, and disperses the remaining clean water to the wetlands. Figure 31 illustrates the proposed stormwater system expansion.
Figure 31: Stormwater System Expansion
TRANSPORTATION

EXISTING VEHICULAR ACCESS
The existing campus core is intended for pedestrian and bike use only, with allowances for service and emergency vehicle access as needed. Private cars may use all existing roadways surrounding the core. Gates prevent travel off-campus to the west, along Valley View Road and NE 185th. Until the fall of 2009, all vehicle traffic entered and exited the campus from Beardslee Boulevard to the north, and parked in the North Garage or used 110th Avenue or Campus Way NE to traverse campus and access the South Garage. In October 2009, a new south entry was completed, providing direct freeway access to SR 522 and direct access to the larger South Garage and southwest surface lots. The new entry is expected to reduce private vehicle traffic across campus.

PROPOSED VEHICULAR ACCESS
Future vehicular access on campus will be restricted along Campus Way NE to enhance the campus pedestrian character and safety. As shown in Figure 32, cars will use 110th and 180th Avenues to traverse the campus. Other than for accessible parking or drop-off, cars will not be permitted on Campus Way between the north parking structure and NE 180th. Because both 110th and 180th have steep segments, up to a 12% grade, this continues to pose a safety challenge in winter months when the roadway ices over. Though the new condition of parking garages at each entry reduces the need to traverse campus, the campus could benefit from installing underground heating elements under steep road segments to melt ice when necessary.
PROPOSED VEHICULAR TRAFFIC WITH PARKING

Figure 32: Vehicular Traffic
TRANSIT ACCESS

As of spring 2010, Sound Transit, Community Transit, and Metro Transit serve the campus with over 400 stops each weekday. Most transit routes serving the campus operate from 6 a.m. to 10 p.m. on weekdays.

Figure 33 illustrates bus access, routes, and stops. Many bus routes currently serve the northern transit stop on campus (the ‘North Loop’). Several routes also travel further south on Campus Way NE and turn around near the Chase House, which is a designated rest stop for bus drivers. This rest stop can remain, but bus circulation is reversed as part of the new south entry, travelling counter-clockwise in a loop around the Chase House. An additional bus drop-off zone is proposed adjacent to the South Garage.

As the campus enrollment increases, transit groups such as Sound Transit, Community Transit, and Metro will consider increasing service to campus when planning new bus routes or expanding existing service. There are no existing funded plans to extend Sound Transit’s Link light rail to Bothell, but concept plans identify the I-405 corridor as a potential long-term (beyond 2030) corridor for rail service.
Figure 33: Transit Traffic

- Proposed Transit Traffic
- Bus Route
- Bus Turn-Around
- Future Southern Access to Campus
- Bus Stop
EXISTING PEDESTRIAN & BICYCLE ACCESS

The campus core is intended for pedestrians and bikes only, with allowances for service and emergency vehicle access as needed. One major walkway, the Promenade, provides pedestrian-only access across campus. The 20’-wide Promenade connects to most of the existing buildings and their main entries are oriented to it. In some areas the Promenade widens to a small plaza, such as the public art and gathering space near the library and the southern gateway to campus between UWB-1 and UWB-2, but the campus does not have a major plaza or central gathering place.

For travelling off campus, the Sammamish River Trail and Burke Gilman Trail are widely-used regional trails and allow cycle access to the UW Seattle campus in less than an hour. Downtown Bothell is easily accessed via the Town-Gown Loop within a 10-15 minute walk.

PROPOSED PEDESTRIAN & BICYCLE ACCESS

As part of the framework concept, the campus circulation grid is expanded to physically and visually connect existing and proposed buildings and open spaces. The pedestrian grid includes the Promenade, the new crescent-shaped pathway providing access to buildings in the uplands, the Hill Climb stairways connecting to the uplands and across Campus Way NE to the lowlands, and west campus lane, a new pedestrian-oriented street with provisions for service and emergency vehicle access as needed. A new walking trail is proposed at the perimeter of the wetlands to allow increased access to study the wetlands and its wildlife, yet constructed so as not to disrupt its growth.

Bicycle parking and lockers are in high and increasing demand. Future buildings will provide bike parking convenient to building entries yet reasonably consolidated. Figure 34 illustrates proposed campus bike routes and bike parking locations for future development.
PROPOSED BICYCLE TRAFFIC
WITH PARKING

Figure 34: Bicycle Traffic

SAMMAMISH TRAIL
BIKE ROUTE
BIKE PARKING

TRANSPORTATION, UTILITIES & PHASING
SERVICE ACCESS

The master plan provides clear service access routes to loading facilities for each building and a Corp Yard with a raised loading dock for centralized receiving. Figure 35 shows proposed service area routes and locations at proposed buildings. For some buildings the service area may simply include a trash enclosure or dedicated area for service vehicles; other buildings with large daily deliveries may require a more robust loading dock. Connected buildings may choose to dedicate their service areas for particular functions, such as separating deliveries from waste and recycling.

While west campus lane is primarily a pedestrian street, it will accommodate small delivery vehicles and waste and recycling pick-up for several buildings. The Promenade and the crescent-shaped path are also primarily pedestrian, but will accommodate service vehicles when the surrounding service routes cannot provide access.

A new Corp Yard is proposed in the SW corner of the campus. The 7,500 SF building is envisioned to centralize receipt of deliveries, with larger trucks unloading at a raised loading dock and transferring deliveries to smaller vehicles for efficient shuttling to other campus buildings. The Corp Yard would reduce the need for loading facilities at each building, thus reducing space needs and costs, and minimizing the extent and cost of roadwork and infrastructure to accommodate large trucks at several buildings. The Corp Yard may also include space for maintenance vehicle parking, maintenance materials, and short-term storage.
PROPOSED SERVICE ROUTES WITH LOADING ZONES

Figure 35: Service Routes

SERVICE ROUTE

SERVICE/LOADING ZONES

CORP YARD
EMERGENCY VEHICLE ACCESS

Emergency access (fire and life support) is required to all buildings on campus. Proposed emergency access paths are shown on Figure 36 with buildings located no more than a hose length of 150 feet from a parked fire vehicle as governed by Bothell Code Chapter 20.08.040. To ensure fire access to the eastern facades of proposed buildings east of Campus Way NE, the existing North Creek Trail coursing through the lowlands and buffer zone will be re-aligned to accommodate proposed buildings and designed to support fire vehicles. Emergency vehicle access to this trail is proposed at the South Loop, directly east of the Chase House with a mountable curb. Signage will be provided to alert trail users to the potential for emergency vehicles using the trail. The Bothell Fire Code also requires that fire lanes be no less than 20' wide and no steeper than 15% and existing and proposed roadways do not exceed this grade.

The crescent-shaped path will be similarly designed to support fire and emergency vehicles to access upland academic buildings and the west face of the Library. Since the crescent-shaped path replaces the previous emergency access west of the library, the path must be completed in one phase and available as a drive-through for emergency vehicles, but the finish material may be surfaced in phases.
CHILLED WATER

Existing Campus Mechanical Infrastructure
With the exception of Cascadia’s Global Learning Arts building, all existing campus mechanical systems are relatively consistent and uniform. Primary systems are outlined below.

Central Chilled Water Distribution
Figure 37 illustrates the existing and proposed chilled water system. Direct buried chilled water supply and return piping originates as 18” piping at the Central Plant. A 16” branch of this service extends to the north edge of campus. The existing system also makes provisions for future development to the west with a 16” valved branch located immediately north of the Central Plant.

Total capacity of the 18” main piping is very large. At a moderate 10 feet per second (fps) velocity, the pipe can accommodate up to 9000 gallons per minute (gpm) in flow. At standard conditions this would permit delivery of 3800 tons of cooling. At somewhat lower velocities each 16” branch could easily handle half of this total flow, providing 1900 tons for each chilled water branch. Chilled water valve vaults are provided at the chilled water branch to each building.

Chilled Water Plant Design
Main piping manifolds within the plant were sized at 16” and 18” to allow for expansion. Existing capacity is provided by a 1000 ton and a 300 ton chiller piped as a primary/secondary plant. Parallel secondary pumps are sized for 1430 gpm each, allowing delivery of 2860 gpm without adding pump capacity. At standard conditions, this flow rate would provide for 1200 tons of cooling to the campus. A third parallel pump could be added to increase flow to 4290 gpm at a comparatively low cost. The additional pump would provide plant capacity of roughly 1800 tons with the addition of a third chiller or replacement of an existing chiller with a larger machine. Full build-out of the plant to the limit of the chilled water piping infrastructure would likely require replacement of one or both existing chillers and/or the expansion of the plant to provide additional chillers.

Heating
Each building is provided with a self-contained heating hot water plant designed around the use of low temperature condensing boilers with Aerco Benchmark boilers being the typical specification.

HVAC Air Distribution
Existing building HVAC (potentially excepting CCC-3) is based on conventional mixed air variable volume hot water reheat designs making use of custom housed air handlers and parallel fan power boxes for perimeter zones. Temperature controls are Johnson Controls Metasys system throughout campus.

Gas Infrastructure
Each building is equipped with central high efficiency gas water heaters.

Process and other 24/7 loads
The original design accommodates 24/7 building loads by using chilled water during daytime operation to cool a condenser water loop in each building. The building condenser and campus chilled water loops are isolated from each other using a heat exchanger. During night operation the central campus chilled water distribution system converts to a condenser water distribution system cooled by the plant cooling towers.
Figure 37: Chilled Water Distribution
STORMWATER

The campus has a robust and sustainable stormwater management system that was designed to accommodate the full campus build-out. Stormwater runoff from the campus is collected, treated if necessary, and discharged to the Sammamish River via North Creek. Stormwater detention is not required due to the site's proximity to North Creek. Figure 38 illustrates the proposed stormwater system, building from the existing infrastructure.

The campus currently uses catch basins, swales, and closed pipe systems to convey stormwater runoff on the campus. Two independent stormwater conveyance systems were constructed to account for different treatment requirements. Subsurface drainage and building roof runoff, referred to as “clean water”, does not require water quality treatment prior to discharging to the wetlands downstream. All onsite surface water runoff collected from paved areas subject to vehicular use and referred to as Pollution Generating Impervious Surface (PGIS) or “dirty water”, is treated prior to discharging to the wetlands downstream. Treatment is provided by a three-stage water quality treatment system consisting of a Coalescing Plate oil/water Separator (CPS), a wet-vault, and a biofiltration facility. In addition to the three existing water quality vaults on campus, the master plan proposes four additional water quality vaults. The adjacent diagram outlines the campus’ stormwater management system.

Clean water and treated dirty water are released into the wetland located on the east side of the campus, providing necessary recharge to the restored wetland and its habitat.

While the stormwater conveyance system was designed to handle the full build-out of the campus based on the preliminary 1995 Master Plan, modifications will be required to support the proposed building locations in the 2010 Master Plan. Clean water will be conveyed to the wetland as designed. Dirty water from paved areas will be collected by a system of catch basins and pipes, and conveyed to a new low impact development (LID) stormwater treatment facility prior to releasing the water to the existing drainage system. Landscaped and natural areas will utilize a combination of catch basins, underdrains, and underground pipes to collect and convey other surface flows to the existing storm drainage system.

Stormwater systems will be designed to City of Bothell Design and Construction Standards. Materials for this phase will consist primarily of 6-inch to 18-inch diameter corrugated polyethylene pipe (CPEP) with smooth interior walls, Type 1/Type 2 catch basins, and project specific area drains and inlets.
Figure 38: Stormwater System
SANITARY SEWER

The existing campus sanitary sewer (gravity) system consists of 6-inch, 8-inch and 12-inch diameter pipes, manholes, and cleanouts. The northern portion of the site discharges to the existing 60-inch diameter trunkline that bisects the site. The southern portion of the site discharges to the existing 24-inch diameter trunkline underneath SR-522.

To accommodate the build-out condition, the existing sanitary sewer system will need to be extended as shown in Figure 39. New 8-inch sanitary sewer lines will be installed within the new west campus lane, along the Promenade, along the regional trail, and near the south entry. These new sanitary sewer lines will provide gravity connection points for the required services of future buildings.

Sanitary sewer systems will be designed to City of Bothell Design and Construction Standards. The sanitary sewer system will consist of 6-inch to 8-inch diameter PVC pipe, manholes, and cleanouts.

DOMESTIC WATER

The existing campus domestic water system consists of 6-inch, 8-inch and 12-inch diameter pipes. To accommodate future improvements, the existing water system will need to expand as shown in Figure 39. A new 8-inch water line will be installed within the new west campus lane, completing a closed loop system between 110th Avenue and 180th Street. The existing closed loop system west of the Library will be adjusted to accommodate the Library expansion. A new 12-inch water line will be installed along the regional trail to complete a closed loop system between Campus Way NE and 180th Street. The existing closed loop system around the South Garage, between 180th Street and the south entry, will be adjusted to accommodate the expansion of the South Garage. In addition to the new water lines, additional fire hydrants, fire department connections (FDC), and other appurtenances may be required to comply with City of Bothell requirements.

Water flow and system pressure will need to be confirmed with the City of Bothell water system model at each phase to ensure adequate accommodation can be made to support the build-out condition.

Domestic water systems will be in accordance with the City of Bothell Design and Construction Standards. The water line will consist of 4-inch to 12-inch diameter, ductile iron, class 52 pipe.
DOMESTIC WATER & SANITARY SEWER

Figure 39: Domestic Water & Sanitary Sewer

EXISTING WATER MAIN
PROPOSED WATER MAIN
EXISTING SANITARY SEWER MAIN
PROPOSED SANITARY SEWER MAIN
ELECTRICAL INFRASTRUCTURE
The existing 12.47kV power lines serving the campus and the campus underground distribution are owned and maintained by Puget Sound Energy (PSE). The Utility owned power distribution system is connected to Utility substation feeders at the north and south ends of campus. The campus’ primary power system consists of 15kV cabling routed via underground duct banks and a series of manholes to pad mounted transformers and pad switches. Campus owned 480 volt service feeders are extended from the transformers into the individual campus buildings. All buildings are electronically metered with the interface to the campus BMS.

As the campus expands the electrical demand shall also increase. There is a need to provide a study of how the increase shall affect the existing electrical service and distribution and what modifications shall be needed to accommodate this expansion.

INFORMATION TECHNOLOGY
Enterprise Information Technology (IT) services for UW Bothell are currently supported by a Data Center located in the UW1 building. This facility houses the core server and data storage infrastructure for the campus, including servers that support critical business and administration needs and use by specialized faculty research. During planning stages for the original campus buildings, this location was insufficiently provisioned to support the current technology needs of the campus. Some of these inadequacies have been partially addressed by retrofitting in areas such as cooling and power capacity; however, large scale defects remain. These include: inefficient cooling, lack of generator based emergency back-up or redundancy (for primary power and cooling), the existence of main water lines above the Data Center, further power capacity expansion unavailable without building upgrades, lack of redundant and power protected networking, and insufficient provisioning of physical space and power access, to support major research technologies. To address these issues and plan for future campus expansion for the next 10-15 years, a replacement Data Center is being planned for the proposed UWB-3 Science and Academic Building. The initial capacity of this space is specified at 100KVA with a maximum capacity of 300KVA. Beyond 15 years, campus growth will necessitate a larger facility. A long term plan for a dedicated Data Center facility should locate it as part of the Physical Plant building, or within close proximity, so as to not impact academic space with future expansion and to provide efficiencies with proximity to the primary plant infrastructure.

PHASING
To ensure the long term success of the master plan, the campus must be able to expand incrementally yet maintain a sense of unity and completeness at each phase of development.

The master plan’s framework of circulation, views, and open spaces helps to provide a sense of completeness at varying stages of build-out, and allows flexibility in phasing and implementing future buildings. The plan clusters buildings by use and provides a range of building locations and footprint sizes in each zone. Specific building sites should respond to programmatic needs, relationships to other buildings and open spaces on the campus, and existing campus infrastructure.

Site selection of each future project should consider its impact on the incremental development of campus infrastructure including utilities, pedestrian paths, roadwork, and recreation and open spaces. The next phase of work (the UWB-3 Science and Academic Building) completes an important segment of the master plan’s circulation grid in the core campus. Due to the campus’ previous investment in a robust utility infrastructure, it is generally more cost effective to grow from the south to the north, expanding from existing utility lines in the roadway.
INTRODUCTION

In keeping with the progressive spirit of University of Washington Bothell, a handful of campus developments transpired in 2011 and have been summarized in the following Amendment to the 2010 Master Plan.

It is important to note that the following revisions support the 2010 master planning process and established organizing framework. The master plan is intended to be a living document and a reflection of the organizing framework and its inherent allowance for flexibility of phasing and the implementation of future buildings.

AREAS OF REVISION

Six main areas of revision (see diagram on adjacent page) have been identified since the development of the 2010 Master Framework Plan. An expanded Upland Academic zone (1) and a future Development Reserve (2) have replaced what was once zoned as Upland Housing. The Student Activity Center (3) has been further defined by the UWB/CCC Student Activity Center Feasibility Report. The campus boundary has grown with the purchase of the Husky Village housing complex (4) and a significant lease at the UW Bothell Beardslee Building (5) for Science & Technology academic programs, research and centers. Finally, the former Wetlands Interpretive Center has been renamed and further developed as the Sarah Simonds Green Conservatory (6).
2011 UWB/CCC MASTER PLAN: AREAS OF REVISION

Figure 42: 2011 Areas of Revision

1. Upland Academic
2. Development Reserve
3. Student Activity Ctr.
4. Husky Village
5. Beardslee Building
6. Conservatory
REVISED UWB/CCC CAMPUS BOUNDARY + CAMPUS ANATOMY

With the purchase of one significant land parcel, the campus boundary now extends out to the northwest, wrapping the Husky Village (previously known as the Beardslee Cove Apartments) and running along NE 185th Street and Beardslee Boulevard. The acquisition of the Husky Village property constitutes an addition of 4.4 acres of land to the total campus acreage and includes approximately 244 student housing beds and 178 dedicated parking spaces.

In addition, UWB has leased 29,000 SF in the Beardslee Professional Building, just to the north of the Husky Village. The programmed space in this building includes academic offices, classrooms, teaching labs, faculty research labs, and academic centers. The lease also includes the use of 132 permitted parking spaces.

Due to the nature of a lease agreement, the building’s area and that of its surrounding land have been omitted from the area calculation as it is technically not within the current campus boundary. Consequently, the total campus acreage has increased from 128 acres in 2010 to 132.4 acres in 2011.

![Figure 43: Revised Campus Anatomy Zones](image)

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<th>CAMPUS ANATOMY</th>
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<td>- WETLAND AND BUFFER</td>
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Revised Campus Anatomy components (revised numbers in red)
APPENDIX: MASTER PLAN AMENDMENT - NOV. 2011

Figure 44: 2011 UWB/CCC Master Plan, with revisions
REVISED ZONE OF INFLUENCE

Figure 45: Zone of Influence with revised Campus Boundary and New Land Acquisition (red dashed line)

<table>
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<tr>
<th>FACILITIES</th>
<th>MASTER PLAN PROGRAM</th>
<th>EXISTING</th>
<th>PROPOSED IN MASTER PLAN</th>
<th>UNMET NEEDS TO BE EXPLORED</th>
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Program Elements (revisions in red)
REVISED PROGRAM ELEMENTS

900-1500 Student Housing Beds
The UW Bothell student housing program has established an initial goal of housing approximately 15% of the total UWB student population in campus housing which would equate to about 900 beds for 6,000 FTE students or 1,500 beds if the program is extended to the full student population of 10,000 FTE students. With the recent addition of the Husky Village housing complex, the UW Bothell campus has acquired 70,722 SF of on-campus housing. Husky Village provides student apartment-style housing with 244 beds.

The Husky Village Community Center was included in the acquisition and is planned to provide opportunities for residents to meet and socialize as well as share in a variety of in-house programs and activities. A total of 166 permitted parking spaces have also been provided and are reserved for residents only.

The University continues to explore options to accommodate the remaining number of desired beds including leasing, acquiring, and public/private partnerships for approximately 650-1,250 beds.

Figure 46: New Program Acquisitions: Husky Village & Beardslee Building
In March of 2011, THA Architecture developed a feasibility study of the Student Activity Center, a process resulting in the UWB/CCC Student Activity Center Feasibility Report (see Reference Documents on pg 88). The UWB/CCC Student Activity Center Planning Advisory Committee (SACPAC) outlined the programmatic needs and the UW Capital Projects Office provided a conceptual budget for a 37,700 GSF facility. The focus of the feasibility study was to develop a conceptual design for the chosen site, develop spatial adjacencies, confirm the target efficiency of the net to gross building area and to test the project budget.

A 3,500 SF Cafe was planned to serve the entire campus community and to be conveniently located in order to service students living on campus. With the acquisition of the Husky Village, it was decided to remove housing and the associated Cafe from the master plan.
Conservatory

The Sarah Simonds Green Conservatory (previously referred to as the Wetlands Interpretive Center), will serve as a working educational center for UW Bothell and will contain a classroom, botanical laboratory and exhibit space. Designed by THA Architecture, the facility is currently in the permitting process and is scheduled to open in 2013.
REVISED UTILITIES

IT Infrastructure
Data connections were made between the new Husky Village Community Center and the Physical Plant for UW network connectivity and security systems.
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REFERENCE DOCUMENTS

21ST Century Campus Initiative
University of Washington Bothell
http://www.uwb.edu/21stcentury/

Campus Facilities Master Plan - July 31, 2006
http://www.uwb.edu/admin/pdf_files/
2006masterplandoc.pdf

University of Washington Climate Action Plan
http://f2.washington.edu/oess/sites/

UWB CCC Student Activity Center - Feasibility Report
March 25, 2011